IN THE CLAIM

There is no amendment to the claims.

1. (Original) A method for allowing a device to be removably attached to a computer system while maintaining the system integrity, comprising the steps of:

configuring a bridge between the device and the computer system; wherein

while in an attached state

if recognizing that the device has been removed from the bridge, then the bridge transitioning into a cleanup state, then a removed state;

while in the cleanup state, performing the ordered steps of

the bridge sending a first signal to the computer system;

in response to the first signal, the computer system sending a second signal to the bridge; and

in response to the second signal, the bridge sending a third signal to the computer system to indicate that the bridge has been removed from the computer system;

removing the device from the bridge is performed without giving prior notice to the bridge, nor the computer system;

the attached state indicating that the device has been attached to the computer system; and

the removed state indicating that the device has been removed from the computer system.

2. (Original) The method of Claim 1 wherein the bridge using a first protocol to communicate with the computer system, and using a second protocol to communicate with the device.

3. (Original) The method of Claim 2 wherein the first protocol or the second protocol is:
a protocol complying with the SCSI standard;
a protocol complying with the IDE standard;
a protocol complying with the fibre channel standard;
a protocol complying with the IEEE 1394 standard; or
a protocol complying with the USB standard.

4. (Original) The method of Claim 2 wherein the bridge includes a processing unit and memory to convert commands of the first protocol and the second protocol.

5.(Original) The method of Claim 2 wherein the first protocol is the same as the second protocol.

6. (Original) The method of Claim 1 wherein, while in the cleanup state, if the bridge receives a processing command, then the bridge sends a fourth signal to the computer system indicating that the bridge cannot process the command.

7. (Original) The method of Claim 6 wherein, while in the cleanup state, the bridge further sends a fifth signal to the computer system indicating that the command has been terminated.

8. (Original) The method of Claim 7 wherein, while in the cleanup state, the computer system, upon receiving the fourth or the fifth signal from the bridge, provides a sixth signal to indicate that the command cannot be processed.

9. (Original) The method of Claim 1 further comprising the step of providing a buffer between the device and the bridge for protecting the bridge from disruption signals from the device.

10. (Original) The method of Claim 1 further comprising the step of providing a buffer between the device and the bridge wherein the buffer prevents the signals passing from the device to the bridge.

11. (Original) The method of Claim 10 wherein the bridge transitioning to the cleanup state upon recognizing that the bridge cannot communicate with the device via the buffer.

12. (Original) The method of Claim 1 wherein:
the bridge recognizes that the device has been removed from the bridge based on a signal asserted at a control pin of the bridge; and
the signal changes when the control pin of the bridge is engaged to or disengaged from a control pin of the device.

13.(Original) A system for allowing a device to be removably attached to a computer system while maintaining the system integrity, comprising:
a bridge interfacing between the device and the computer system;
wherein

while in an attached state

if recognizing that the device has been removed from the bridge, then the bridge transitioning into a cleanup state, then a removed state;

while in the cleanup state

the bridge sending a first signal to the computer system;

in response to the first signal, the computer system sending a second signal to the bridge; and

in response to the second signal, the bridge sending a third signal to the computer system to indicate that the bridge has been removed from the computer system;

removing the device from the bridge is performed without giving prior notice to the bridge, nor the computer system;

the attached state indicating that the device has been attached to the computer system; and

the removed state indicating that the device has been removed from the computer system.

14. (Original) The system of Claim 13 wherein the bridge using a first protocol to communicate with the computer system, and using a second protocol to communicate with the device.

15. (Original) The system of Claim 14 wherein the first protocol or the second protocol is:

a protocol complying with the SCSI standard;

a protocol complying with the IDE standard;

a protocol complying with the fibre channel standard;

a protocol complying with the IEEE 1394 standard; or

a protocol complying with the USB standard.

16. (Original) The system of Claim 13 wherein the bridge includes a processing unit and memory to convert commands of the first protocol and the second protocol.

17. (Original) The system of Claim 13 wherein the first protocol is the same as the second protocol.

18. (Original) The system of Claim 13 wherein, while in the cleanup state, if the bridge receives a processing command, then the bridge sends a fourth signal to the computer system indicating that the bridge cannot process the command.

19.(Original) The system of Claim 18 wherein, while in the cleanup state, the bridge further sends a fifth signal to the computer system indicating that the command has been terminated.

20.(Original) The system of Claim 19 wherein, while in the cleanup state, the computer system, upon receiving the fourth or the fifth signal from the bridge, provides a sixth signal to indicate that the command cannot be processed.

21. (Original) The system of Claim 13 further comprising a buffer between the device and the bridge for protecting the bridge from disruption signals from the device.

22. (Original) The system of Claim 13 further comprising a buffer between the device and the bridge wherein the buffer prevents the signals passing from the device to the bridge.

23. The system of Claim 22 wherein the bridge transitions to the cleanup state upon recognizing that the bridge cannot communicate with the device via the buffer.

24. (Original) The system of Claim 13 wherein:
the bridge recognizes that the device has been removed from the bridge based on a signal asserted at a control pin of the bridge; and
the signal changes when the control pin of the bridge is engaged to or disengaged from a control pin of the device.

25. (Original) A method for hot removing a device from a system, comprising the steps of:
configuring a bridge between the device and the system; and
configuring a buffer between the device and the bridge for protecting the bridge from signals from the device; wherein
while in an attached state
if recognizing that the device has been removed from the bridge, then the bridge transitioning into a cleanup state, then a removed state;
while in the cleanup state,
the bridge sending a first signal to the system;
in response to the first signal, the system sending a second signal to the bridge; and

in response to the second signal, the bridge sending a third signal to the system to indicate that the bridge has been removed from the system.